

CLAIMS

1. (Currently Amended) A method comprising:

moving a document a first distance in a first direction;

scanning a portion of said document with a scanning head;

moving said scanning head a second distance in the first direction, wherein said second distance is smaller than said first distance;

scanning another portion of said document; and

repeating said moving the document, said scanning, and said moving said scanning head to scan a plurality of portions of said document ~~paper sheet~~.

2. (Previously presented) The method of claim 1, wherein repeating said moving the document, said scanning, and said moving said scanning head to scan a plurality of portions of said document includes moving the scanning head in a single direction.

3. (Currently Amended) The method of claim 1, further comprises moving said scanning head in a second direction opposite to said first direction wherein repeating said moving the document, said scanning, and said moving said scanning head to scan a plurality of portions of said document includes moving the scanning head in more than one direction.

4. (Currently Amended) The method of claim 1, wherein said method is carried out in a sheet feeder, and wherein said sheet feeder includes a plurality of rollers rotatably coupled to a conveying guide for moving said document[[],].

5. (Previously presented) The method of claim 4, wherein said sheet feeder includes a scanning window, and wherein a length of said scanning window is larger than or equal to said first distance.

6. (Currently Amended) A method comprising:
moving a document a first distance in a first direction over a scanning window;
scanning a portion of said document with a scanning head in an original initial position;
moving said scanning head a second distance in the first direction or in a second direction that is opposite of the first direction, wherein the second distance is smaller than the first distance;
repeating said scanning and said moving said scanning head until said scanning head scans a plurality of portions of said document over said scanning window;
returning said scanning head to said original position; and,
repeating said moving said document, said scanning, said moving said scanning head, and said repeating until said document is substantially scanned.

7. (Currently Amended) The method of claim 6, wherein said scanning head moves back and forth in the first direction and the second direction to scan said document.

8. (Currently Amended) A method comprising:
scanning a first portion of a side of a document located in a first document position relative to a scanning window with a scanning head located in a first head position;
moving the scanning head to a second head position after scanning the first portion of the side of the document;

scanning a second portion of the side of the document with the scanning head located in the second head position moving the document to a second document position relative to the scanning window; and

scanning a third portion of the side of the document with the document in the second position, wherein the scanning head remains stationary in the first head position while scanning the first portion of the side of the document and the scanning head remains stationary in the second head position while scanning the second portion of the side of the document.

9. (Previously presented) The method of claim 8 wherein the scanning head is located in a third head position when scanning the third portion of the side of the document, the third head position being different than the first and second head positions.

10. (Previously presented) The method of claim 8 wherein the scanning head is located in at least one of the first and second head position when scanning the third portion of the side of the document.

11. (Currently Amended) A system comprising:

a sheet feeder capable of moving a document a first distance in a first direction over a scanning window;

a scanning head capable of scanning a first portion of said document over said scanning window;

a stepping motor capable of moving said scanning head a second distance in a the first direction,

wherein said second distance is smaller than said first distance;

wherein said scanning head is further capable of scanning a second portion of said document over said scanning window; and

wherein said sheet feeder is further capable of again moving said document said first distance over said scanning window.

12. (Previously presented) A system of claim 11, wherein said sheet feeder is further capable of moving said document further over said scanning window and said scanning head is further capable of scanning a third portion of said document over said scanning window, and wherein said stepping motor is further capable of again moving said scanning head said second distance in said first direction.

13. (Currently Amended) The system of claim 12, wherein said scanning head is further capable of moving back and forth in a scanning direction to scan said document, the scanning direction including the first direction and a second direction opposite of the first direction.

14. (Previously presented) The system of claim 12, wherein said sheet feeder comprises a conveying guide, and a plurality of rollers arranged on said conveying guide, and wherein at least two of said plurality of rollers are in contact with each other, such that said document may be moved at least in part by rotating the at least two of said plurality of rollers.

15. (Previously presented) The system of claim 12, wherein a dimension of said scanning window is larger than or equal to said first distance.

16. (Currently Amended) An apparatus comprising:

means for moving a document a first distance in a first direction over a scanning window;

means for scanning a first portion of said document over said scanning window;

means for moving said means for scanning a second distance in a the first direction, wherein said second distance is smaller than said first distance;

said means for scanning being capable of further including a means for scanning a second portion of said document over said scanning window; and

said means for moving said document being capable of further including means for moving said document further over said scanning window.

17. (Currently Amended) The apparatus of claim 16, wherein:

said means for scanning being capable of further including a means for scanning a third portion of said document over said scanning window; and

said means for moving said means for scanning being capable of further including means for again moving said means for scanning said second distance in said first direction.

18. (Currently Amended) The apparatus of claim 16, ~~and~~ further comprising: means for moving said means for scanning back and forth in a scanning direction to scan said document, the scanning direction including the first direction and a second direction opposite of the first direction.

19. (Previously presented) The apparatus of claim 16, wherein a dimension of said scanning window is larger than or equal to said first distance.

20. (Currently Amended) A method comprising:
moving a document a first distance in a first direction over a scanning window;
with a scanning head, scanning a first portion of said document over said scanning window;
moving said scanning head a second distance in ~~a~~ the first direction or a second direction that is opposite of the first direction, wherein said second distance is smaller than said first distance;
scanning a second portion of said document over said scanning window;
moving said document further over said scanning window in the first direction; and
with said scanning head, scanning a third portion of said document over said scanning window.

21. (Currently Amended) The method of claim 20, ~~and~~ further comprising:
moving said scanning head said second distance in said first direction again; and
scanning a fourth portion of said document.

22. (Currently Amended) The method of claim 21, ~~and~~ further comprising: moving said scanning head back and forth in a scanning direction to scan said document, the scanning direction including the first direction and the second direction.

23. (Previously presented) The method of claim 21, wherein moving a document comprises rotating at least two of a plurality of rollers, wherein said plurality of rollers are at least in part coupled to a sheet feeder.

24. (Previously presented) The method of claim 21, wherein a dimension of said scanning window is larger than or equal to said first distance.

25. (Canceled)

26. (Previously presented) The method of claim 8, further comprising moving the scanning head a first distance to the first head position, wherein moving the scanning head to a second head position includes moving the scanning head a second distance from the first head position to the second head position, the second distance being smaller than the first distance.

27. (New) The method of claim 1, wherein the scanning head remains stationary while scanning the portions of the document.

28. (New) The method of claim 6, wherein the scanning head remains stationary in the original initial position while scanning the portion of the document.

29. (New) The system of claim 11, wherein the scanning head remains stationary while scanning the first portion of the document over the scanning window and the scanning head

remains stationary while scanning the second portion of the document over the scanning window.

30. (New) The apparatus of claim 16, wherein the means for scanning remains stationary while scanning the first portion of the document over the scanning window and the means for scanning remains stationary while scanning the second portion of the document over the scanning window.

31. (New) The method of claim 20, wherein the scanning head remains stationary while scanning the first portion of the document and the scanning head remains stationary while scanning the second portion of the document.